Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

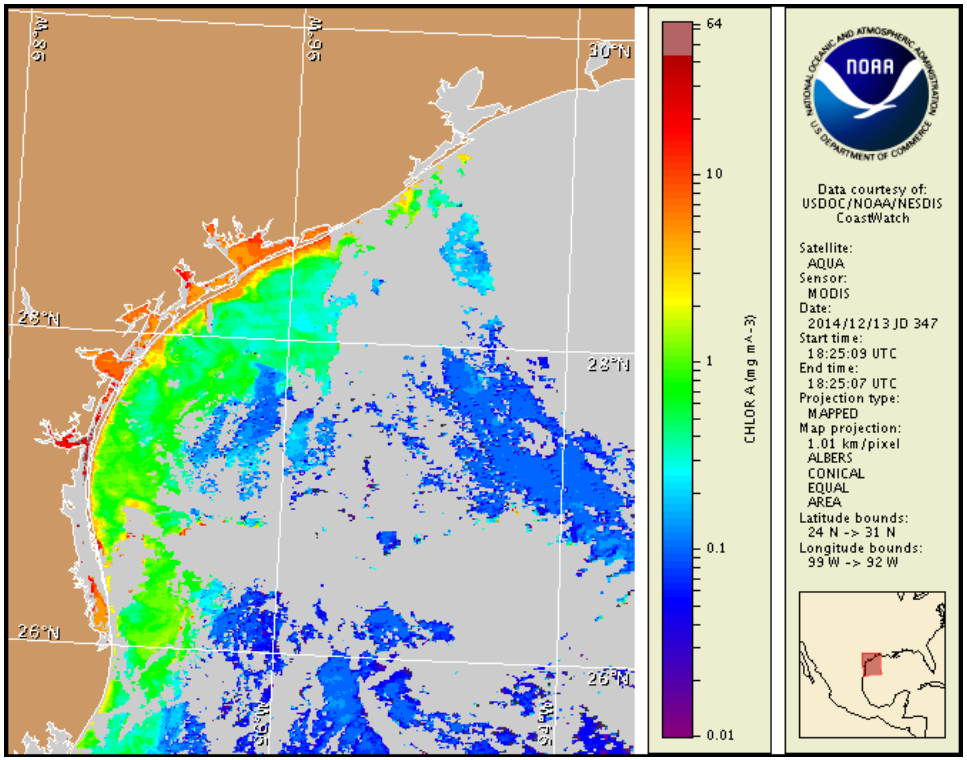
Monday, 15 December 2014

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, December 8, 2014



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from December 5 to 11: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information can be obtained through the Texas Parks and Wildlife Department at:

http://www.tpwd.state.tx.us./landwater/water/environconcerns/hab/redtide/status.phtml

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To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:

http://tidesandcurrents.noaa.gov/hab/bulletins.html

Conditions Report

Karenia brevis (commonly known as Texas red tide) ranges from not present to background concentrations along the coast of Texas. No respiratory irritation is expected alongshore Texas Monday, December 15 through Monday, December 22.

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations.

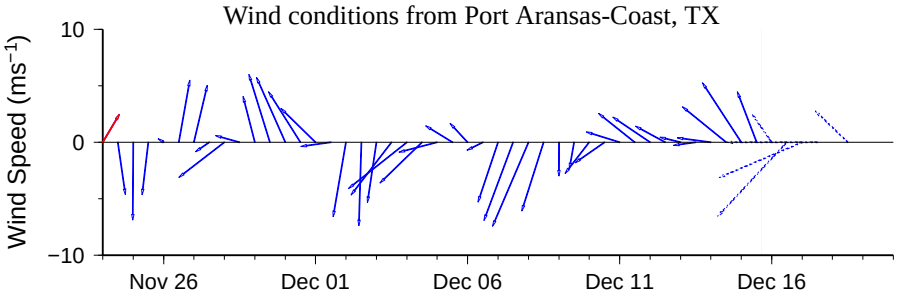
Analysis

Sampling from Texas A&M University's Imaging FlowCytobot, located on the Port Aransas ship channel, continues to indicate that *Karenia brevis* concentrations range between 'not present' and 'background' (TAMU; 12/9-12/15). For information on area shellfish restrictions, contact the Texas Department of State Health Services.

Recent MODIS Aqua imagery (12/13, shown left) is obscured by clouds from Sabine Pass to the Matagorda Peninsula and along much of South Padre Island, limiting analysis in these regions. Elevated chlorophyll (2-6 μg/L) is visible in patches along- and offshore the coast of Texas from Matagorda Island to the Padre Island National Seashore. Elevated chlorophyll is not necessarily indicative of the presence of *K. brevis* and is most likely due to the resuspension of benthic chlorophyll and sediments along the coast.

Forecast models based on predicted near-surface currents indicate a potential maximum transport of 20km south from the Port Aransas region from December 13-18.

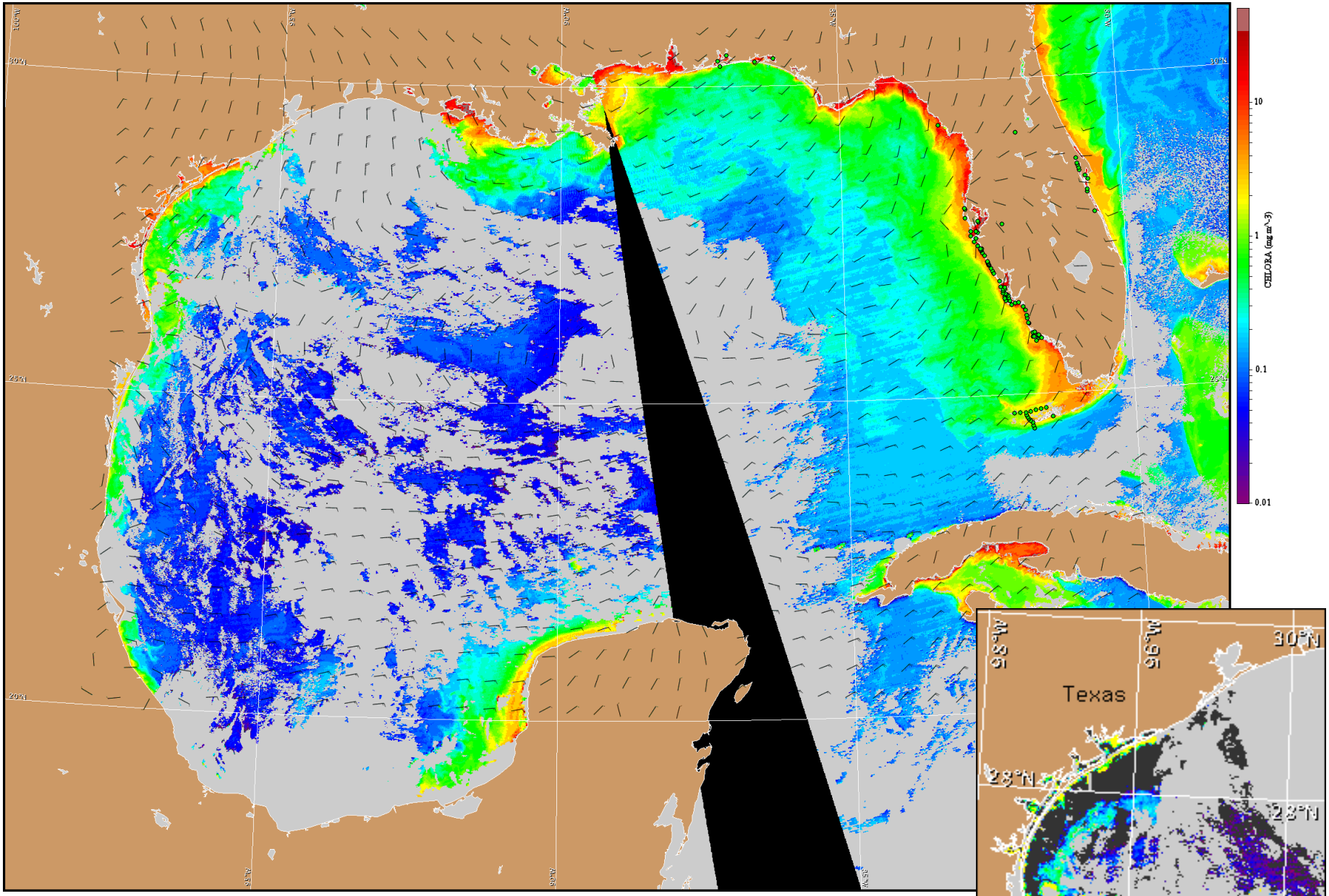
Derner, Davis



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

Wind Analysis

Port Aransas: Southwest winds (5-10kn, 3-5m/s) today. South winds (5kn, 3m/s) tonight becoming north (15-20kn, 8-10m/s) after midnight. Northeast winds (10-20kn, 5-10m/s) Tuesday. East winds (15kn, 8m/s) Wednesday becoming southeast (10-15kn, 5-8m/s) Wednesday night. South winds (10-15kn) Thursday. Southwest winds (10kn, 5m/s) Friday becoming northwest Friday afternoon. North wind (15-20kn) Friday night.



Satellite chlorophyll image and forecast winds for December 16, 2014 12Z with points representing cell concentration sampling data from December 5 to 11: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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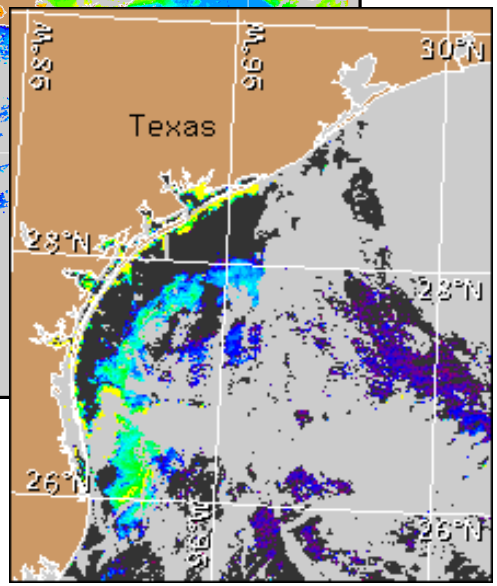

Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).